



SEQUENCE LISTING

<110> Jensenius, Jens Chr.
Thiel, Steffen

<120> MASP-2 COMPLEMENT-FIXING ENZYME, AND
USES FOR IT

<130> 09011-002003

<140> 09/874,238

<141> 2001-06-04

<150> 09/054,218

<151> 1998-04-02

<150> 60/042,678

<151> 1997-04-03

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<212> PRT

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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Pro	Gly	Phe	Pro	Gly	Glu	Tyr	Ala	Asn	Asp	Gln	Glu	Arg	Arg	Trp	Thr
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Leu	Thr	Ala	Pro	Pro	Gly	Tyr	Arg	Leu	Arg	Leu	Tyr	Phe	Thr	His	Phe
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Asp	Leu	Glu	Leu	Ser	His	Leu	Cys	Glu	Tyr	Asp	Phe	Val	Lys	Leu	Ser
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Ser	Gly	Ala	Lys	Val	Leu	Ala	Thr	Leu	Cys	Gly	Gln	Glu	Ser	Thr	Asp
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Thr	Glu	Arg	Ala	Pro	Gly	Lys	Asp	Thr	Phe	Tyr	Ser	Leu	Gly	Ser	Ser
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Leu Asp Ile Thr Phe Arg Ser Asp Tyr Ser Asn Glu Lys Pro Phe Thr
 115 120 125
 Gly Phe Glu Ala Phe Tyr Ala Ala Glu Asp Ile Asp Glu Cys Gln Val
 130 135 140
 Ala Pro Gly Glu Ala Pro Thr Cys Asp His His Cys His Asn His Leu
 145 150 155 160
 Gly Gly Phe Tyr Cys Ser Cys Arg Ala Gly Tyr Val Leu His Arg Asn
 165 170 175
 Lys Arg Thr Cys Ser Ala Leu Cys Ser Gly Gln Val Phe Thr Gln Arg
 180 185 190
 Ser Gly Glu Leu Ser Ser Pro Glu Tyr Pro Arg Pro Tyr Pro Lys Leu
 195 200 205
 Ser Ser Cys Thr Tyr Ser Ile Ser Leu Glu Glu Gly Phe Ser Val Ile
 210 215 220
 Leu Asp Phe Val Glu Ser Phe Asp Val Glu Thr His Pro Glu Thr Leu
 225 230 235 240
 Cys Pro Tyr Asp Phe Leu Lys Ile Gln Thr Asp Arg Glu Glu His Gly
 245 250 255
 Pro Phe Cys Gly Lys Thr Leu Pro His Arg Ile Glu Thr Lys Ser Asn
 260 265 270
 Thr Val Thr Ile Thr Phe Val Thr Asp Glu Ser Gly Asp His Thr Gly
 275 280 285
 Trp Lys Ile His Tyr Thr Ser Thr Ala Gln Pro Cys Pro Tyr Pro Met
 290 295 300
 Ala Pro Pro Asn Gly His Val Ser Pro Val Gln Ala Lys Tyr Ile Leu
 305 310 315 320
 Lys Asp Ser Phe Ser Ile Phe Cys Glu Thr Gly Tyr Glu Leu Leu Gln
 325 330 335
 Gly His Leu Pro Leu Lys Ser Phe Thr Ala Val Cys Gln Lys Asp Gly
 340 345 350
 Ser Trp Asp Arg Pro Met Pro Ala Cys Ser Ile Val Asp Cys Gly Pro
 355 360 365
 Pro Asp Asp Leu Pro Ser Gly Arg Val Glu Tyr Ile Thr Gly Pro Gly
 370 375 380
 Val Thr Thr Tyr Lys Ala Val Ile Gln Tyr Ser Cys Glu Glu Thr Phe
 385 390 395 400
 Tyr Thr Met Lys Val Asn Asp Gly Lys Tyr Val Cys Glu Ala Asp Gly
 405 410 415
 Phe Trp Thr Ser Ser Lys Gly Glu Lys Ser Leu Pro Val Cys Glu Pro
 420 425 430
 Val Cys Gly Leu Ser Ala Arg Thr Thr Gly Gly Arg Ile Tyr Gly Gly
 435 440 445
 Gln Lys Ala Lys Pro Gly Asp Phe Pro Trp Gln Val Leu Ile Leu Gly
 450 455 460
 Gly Thr Thr Ala Ala Gly Ala Leu Leu Tyr Asp Asn Trp Val Leu Thr
 465 470 475 480
 Ala Ala His Ala Val Tyr Glu Gln Lys His Asp Ala Ser Ala Leu Asp
 485 490 495
 Ile Arg Met Gly Thr Leu Lys Arg Leu Ser Pro His Tyr Thr Gln Ala
 500 505 510
 Trp Ser Glu Ala Val Phe Ile His Glu Gly Tyr Thr His Asp Ala Gly
 515 520 525
 Phe Asp Asn Asp Ile Ala Leu Ile Lys Leu Asn Asn Lys Val Val Ile
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 Asn Ser Asn Ile Thr Pro Ile Cys Leu Pro Arg Lys Glu Ala Glu Ser
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 Phe Met Arg Thr Asp Asp Ile Gly Thr Ala Ser Gly Trp Gly Leu Thr

				565					570					575			
Gln	Arg	Gly	Phe	Leu	Ala	Arg	Asn	Leu	Met	Tyr	Val	Asp	Ile	Pro	Ile		
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Arg	Gly	Ser	Val	Thr	Ala	Asn	Met	Leu	Cys	Ala	Gly	Leu	Glu	Ser	Gly		
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Gly	Lys	Asp	Ser	Cys	Arg	Gly	Asp	Ser	Gly	Gly	Ala	Leu	Val	Phe	Leu		
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Asp	Ser	Glu	Thr	Glu	Arg	Trp	Phe	Val	Gly	Gly	Ile	Val	Ser	Trp	Gly		
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Ser	Met	Asn	Cys	Gly	Glu	Ala	Gly	Gln	Tyr	Gly	Val	Tyr	Thr	Lys	Val		
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ctg	ggc	ctt	ctg	tgt	ggc	tcg	gtg	gcc	acc	ccc	tta	ggc	ccg	aag	tgg		102
Leu	Gly	Leu	Leu	Cys	Gly	Ser	Val	Ala	Thr	Pro	Leu	Gly	Pro	Lys	Trp		
		10					15					20					
cct	gaa	cct	gtg	ttc	ggg	cgc	ctg	gca	tcc	ccc	ggc	ttt	cca	ggg	gag		150
Pro	Glu	Pro	Val	Phe	Gly	Arg	Leu	Ala	Ser	Pro	Gly	Phe	Pro	Gly	Glu		
		25				30					35						
tat	gcc	aat	gac	cag	gag	cgg	cgc	tgg	acc	ctg	act	gca	ccc	ccc	ggc		198
Tyr	Ala	Asn	Asp	Gln	Glu	Arg	Arg	Trp	Thr	Leu	Thr	Ala	Pro	Pro	Gly		
	40				45					50							
tac	cgc	ctg	cgc	ctc	tac	ttc	acc	cac	ttc	gac	ctg	gag	ctc	tcc	cac		246
Tyr	Arg	Leu	Arg	Leu	Tyr	Phe	Thr	His	Phe	Asp	Leu	Glu	Leu	Ser	His		
	55			60				65						70			
ctc	tgc	gag	tac	gac	ttc	gtc	aag	ctg	agc	tcg	ggg	gcc	aag	gtg	ctg		294
Leu	Cys	Glu	Tyr	Asp	Phe	Val	Lys	Leu	Ser	Ser	Gly	Ala	Lys	Val	Leu		
			75					80					85				
gcc	acg	ctg	tgc	ggg	cag	gag	agc	aca	gac	acg	gag	cgg	gcc	cct	ggc		342
Ala	Thr	Leu	Cys	Gly	Gln	Glu	Ser	Thr	Asp	Thr	Glu	Arg	Ala	Pro	Gly		
		90					95					100					
aag	gac	act	ttc	tac	tcg	ctg	ggc	tcc	agc	ctg	gac	att	acc	ttc	cgc		390
Lys	Asp	Thr	Phe	Tyr	Ser	Leu	Gly	Ser	Ser	Leu	Asp	Ile	Thr	Phe	Arg		
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gca gcc gag gac att gac gag tgc cag gtg gcc ccg gga gag gcg ccc Ala Ala Glu Asp Ile Asp Glu Cys Gln Val Ala Pro Gly Glu Ala Pro 135 140 145 150	486
acc tgc gac cac cac tgc cac aac cac ctg ggc ggt ttc tac tgc tcc Thr Cys Asp His His Cys His Asn His Leu Gly Gly Phe Tyr Cys Ser 155 160 165	534
tgc cgc gca ggc tac gtc ctg cac cgt aac aag cgc acc tgc tca gcc Cys Arg Ala Gly Tyr Val Leu His Arg Asn Lys Arg Thr Cys Ser Ala 170 175 180	582
ctg tgc tcc ggc cag gtc ttc acc cag agg tct ggg gag ctc agc agc Leu Cys Ser Gly Gln Val Phe Thr Gln Arg Ser Gly Glu Leu Ser Ser 185 190 195	630
cct gaa tac cca cgg ccg tat ccc aaa ctc tcc agt tgc act tac agc Pro Glu Tyr Pro Arg Pro Tyr Pro Lys Leu Ser Ser Cys Thr Tyr Ser 200 205 210	678
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ttc gat gtg gag aca cac cct gaa acc ctg tgt ccc tac gac ttt ctc Phe Asp Val Glu Thr His Pro Glu Thr Leu Cys Pro Tyr Asp Phe Leu 235 240 245	774
aag att caa aca gac aga gaa gaa cat ggc cca ttc tgt ggg aag aca Lys Ile Gln Thr Asp Arg Glu Glu His Gly Pro Phe Cys Gly Lys Thr 250 255 260	822
ttg ccc cac agg att gaa aca aaa agc aac acg gtg acc atc acc ttt Leu Pro His Arg Ile Glu Thr Lys Ser Asn Thr Val Thr Ile Thr Phe 265 270 275	870
gtc aca gat gaa tca gga gac cac aca ggc tgg aag atc cac tac acg Val Thr Asp Glu Ser Gly Asp His Thr Gly Trp Lys Ile His Tyr Thr 280 285 290	918
agc aca gcg cag cct tgc cct tat ccg atg gcg cca cct aat ggc cac Ser Thr Ala Gln Pro Cys Pro Tyr Pro Met Ala Pro Pro Asn Gly His 295 300 305 310	966
gtt tca cct gtg caa gcc aaa tac atc ctg aaa gac agc ttc tcc atc Val Ser Pro Val Gln Ala Lys Tyr Ile Leu Lys Asp Ser Phe Ser Ile 315 320 325	1014
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ccc gcg tgc agc att gtt gac tgt ggc cct cct gat gat cta ccc agt	1158
Pro Ala Cys Ser Ile Val Asp Cys Gly Pro Pro Asp Asp Leu Pro Ser	
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ggc cga gtg gag tac atc aca ggt cct gga gtg acc acc tac aaa gct	1206
Gly Arg Val Glu Tyr Ile Thr Gly Pro Gly Val Thr Thr Tyr Lys Ala	
375 380 385 390	
gtg att cag tac agc tgt gaa gag acc ttc tac aca atg aaa gtg aat	1254
Val Ile Gln Tyr Ser Cys Glu Glu Thr Phe Tyr Thr Met Lys Val Asn	
395 400 405	
gat ggt aaa tat gtg tgt gag gct gat gga ttc tgg acg agc tcc aaa	1302
Asp Gly Lys Tyr Val Cys Glu Ala Asp Gly Phe Trp Thr Ser Ser Lys	
410 415 420	
gga gaa aaa tca ctc cca gtc tgt gag cct gtt tgt gga cta tca gcc	1350
Gly Glu Lys Ser Leu Pro Val Cys Glu Pro Val Cys Gly Leu Ser Ala	
425 430 435	
cgc aca aca gga ggg cgt ata tat gga ggg caa aag gca aaa cct ggt	1398
Arg Thr Thr Gly Gly Arg Ile Tyr Gly Gly Gln Lys Ala Lys Pro Gly	
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gat ttt cct tgg caa gtc ctg ata tta ggt gga acc aca gca gca ggt	1446
Asp Phe Pro Trp Gln Val Leu Ile Leu Gly Gly Thr Thr Ala Ala Gly	
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gca ctt tta tat gac aac tgg gtc cta aca gct gct cat gcc gtc tat	1494
Ala Leu Leu Tyr Asp Asn Trp Val Leu Thr Ala Ala His Ala Val Tyr	
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Glu Gln Lys His Asp Ala Ser Ala Leu Asp Ile Arg Met Gly Thr Leu	
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aaa aga cta tca cct cat tat aca caa gcc tgg tct gaa gct gtt ttt	1590
Lys Arg Leu Ser Pro His Tyr Thr Gln Ala Trp Ser Glu Ala Val Phe	
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Ile His Glu Gly Tyr Thr His Asp Ala Gly Phe Asp Asn Asp Ile Ala	
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Leu Ile Lys Leu Asn Asn Lys Val Val Ile Asn Ser Asn Ile Thr Pro	
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att tgt ctg cca aga aaa gaa gct gaa tcc ttt atg agg aca gat gac	1734
Ile Cys Leu Pro Arg Lys Glu Ala Glu Ser Phe Met Arg Thr Asp Asp	
555 560 565	
att gga act gca tct gga tgg gga tta acc caa agg ggt ttt ctt gct	1782

Ile Gly Thr Ala Ser Gly Trp Gly Leu Thr Gln Arg Gly Phe Leu Ala	
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aga aat cta atg tat gtc gac ata ccg att gtt gac cat caa aaa tgt	1830
Arg Asn Leu Met Tyr Val Asp Ile Pro Ile Val Asp His Gln Lys Cys	
585 590 595	
act gct gca tat gaa aag cca ccc tat cca agg gga agt gta act gct	1878
Thr Ala Ala Tyr Glu Lys Pro Pro Tyr Pro Arg Gly Ser Val Thr Ala	
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Asn Met Leu Cys Ala Gly Leu Glu Ser Gly Gly Lys Asp Ser Cys Arg	
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Gly Asp Ser Gly Gly Ala Leu Val Phe Leu Asp Ser Glu Thr Glu Arg	
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Trp Phe Val Gly Gly Ile Val Ser Trp Gly Ser Met Asn Cys Gly Glu	
650 655 660	
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Ala Gly Gln Tyr Gly Val Tyr Thr Lys Val Ile Asn Tyr Ile Pro Trp	
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atc gag aac ata att agt gat ttt taacttgctg gtctgcagtc aaggattctt	2124
Ile Glu Asn Ile Ile Ser Asp Phe	
680 685	
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tcattttctcc acttgccagt ttaattccag ccttaccat tgactcaagg ggacataaac	2304
cacgagagt acagtcattt ttgcccaccc agtgtaattg cactgctcaa attacatttc	2364
attaccttaa aaagccagtc tcttttcata ctggctgttg gcattttctgt aaactgctg	2424
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Val	Pro	Asp	Gly	Phe	Arg	Ile	Lys	Leu	Tyr	Phe	Met	His	Phe	Asn	Leu	35	40	45	
Glu	Ser	Ser	Tyr	Leu	Cys	Glu	Tyr	Asp	Tyr	Val	Lys	Val	Glu	Thr	Glu	50	55	60	
Asp	Gln	Val	Leu	Ala	Thr	Phe	Cys	Gly	Arg	Glu	Thr	Thr	Asp	Thr	Glu	65	70	75	80
Gln	Thr	Pro	Gly	Gln	Glu	Val	Val	Leu	Ser	Pro	Gly	Ser	Phe	Met	Ser	85	90	95	
Ile	Thr	Phe	Arg	Ser	Asp	Phe	Ser	Asn	Glu	Glu	Arg	Phe	Thr	Gly	Phe	100	105	110	
Asp	Ala	His	Tyr	Met	Ala	Val	Asp	Val	Asp	Glu	Cys	Lys	Glu	Arg	Glu	115	120	125	
Asp	Glu	Glu	Leu	Ser	Cys	Asp	His	Tyr	Cys	His	Asn	Tyr	Ile	Gly	Gly	130	135	140	
Tyr	Tyr	Cys	Ser	Cys	Arg	Phe	Gly	Tyr	Ile	Leu	His	Thr	Asp	Asn	Arg	145	150	155	160
Thr	Cys	Arg	Val	Glu	Cys	Ser	Asp	Asn	Leu	Phe	Thr	Gln	Arg	Thr	Gly	165	170	175	
Val	Ile	Thr	Ser	Pro	Asp	Phe	Pro	Asn	Pro	Tyr	Pro	Lys	Ser	Ser	Glu	180	185	190	
Cys	Leu	Tyr	Thr	Ile	Glu	Leu	Glu	Gly	Phe	Met	Val	Asn	Leu	Gln	195	200	205		
Phe	Glu	Asp	Ile	Phe	Asp	Ile	Glu	Asp	His	Pro	Glu	Val	Pro	Cys	Pro	210	215	220	
Tyr	Asp	Tyr	Ile	Lys	Ile	Lys	Val	Gly	Pro	Lys	Val	Leu	Gly	Pro	Phe	225	230	235	240
Cys	Gly	Glu	Lys	Ala	Pro	Glu	Pro	Ile	Ser	Thr	Gln	Ser	His	Ser	Val	245	250	255	
Leu	Ile	Leu	Phe	His	Ser	Asp	Asn	Ser	Gly	Glu	Asn	Arg	Gly	Trp	Arg	260	265	270	
Leu	Ser	Tyr	Arg	Ala	Ala	Gly	Asn	Glu	Pro	Glu	Leu	Gln	Pro	Pro	Val	275	280	285	
His	Gly	Lys	Ile	Glu	Pro	Ser	Gln	Ala	Lys	Tyr	Phe	Phe	Lys	Asp	Gln	290	295	300	
Val	Leu	Val	Ser	Cys	Asp	Thr	Gly	Tyr	Lys	Val	Leu	Lys	Asp	Asn	Val	305	310	315	320
Glu	Met	Asp	Thr	Phe	Gln	Ile	Glu	Cys	Leu	Lys	Asp	Gly	Thr	Trp	Ser	325	330	335	
Asn	Lys	Ile	Pro	Thr	Cys	Lys	Ile	Val	Asp	Cys	Arg	Ala	Pro	Gly	Glu	340	345	350	
Leu	Glu	His	Gly	Leu	Ile	Thr	Phe	Ser	Thr	Arg	Asn	Asn	Leu	Thr	Thr	355	360	365	
Tyr	Lys	Ser	Glu	Ile	Lys	Tyr	Ser	Cys	Gln	Glu	Pro	Tyr	Tyr	Lys	Met	370	375	380	
Leu	Asn	Asn	Asn	Thr	Gly	Ile	Tyr	Thr	Cys	Ser	Ala	Gln	Gly	Val	Trp	385	390	395	400
Met	Asn	Lys	Val	Leu	Gly	Arg	Ser	Leu	Pro	Thr	Cys	Leu	Pro	Val	Cys	405	410	415	

Gly Leu Pro Lys Phe Ser Arg Lys Leu Met Ala Arg Ile Phe Asn Gly
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 Arg Pro Ala Gln Lys Gly Thr Thr Pro Trp Ile Ala Met Leu Ser His
 435 440 445
 Leu Asn Gly Gln Pro Phe Cys Gly Gly Ser Leu Leu Gly Ser Ser Trp
 450 455 460
 Ile Val Thr Ala Ala His Cys Leu His Gln Ser Leu Asp Pro Lys Asp
 465 470 475 480
 Pro Thr Leu Arg Asp Ser Asp Leu Leu Ser Pro Ser Asp Phe Lys Ile
 485 490 495
 Ile Leu Gly Lys His Trp Arg Leu Arg Ser Asp Glu Asn Glu Gln His
 500 505 510
 Leu Gly Val Lys His Thr Thr Leu His Pro Lys Tyr Asp Pro Asn Thr
 515 520 525
 Phe Glu Asn Asp Val Ala Leu Val Glu Leu Leu Glu Ser Pro Val Leu
 530 535 540
 Asn Ala Phe Val Met Pro Ile Cys Leu Pro Glu Gly Pro Gln Gln Glu
 545 550 555 560
 Gly Ala Met Val Ile Val Ser Gly Trp Gly Lys Gln Phe Leu Gln Arg
 565 570 575
 Phe Pro Glu Thr Leu Met Glu Ile Glu Ile Pro Ile Val Asp His Ser
 580 585 590
 Thr Cys Gln Lys Ala Tyr Ala Pro Leu Lys Lys Lys Val Thr Arg Asp
 595 600 605
 Met Ile Cys Ala Gly Glu Lys Glu Gly Gly Lys Asp Ala Cys Ser Gly
 610 615 620
 Asp Ser Gly Gly Pro Met Val Thr Leu Asn Arg Glu Arg Gly Gln Trp
 625 630 635 640
 Tyr Leu Val Gly Thr Val Ser Trp Gly Asp Asp Cys Gly Lys Lys Asp
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 35 40 45
 Glu Pro Ser Glu Gly Cys Phe Tyr Asp Tyr Val Lys Ile Ser Ala Asp
 50 55 60
 Lys Lys Ser Leu Gly Arg Phe Cys Gly Gln Leu Gly Ser Pro Leu Gly
 65 70 75 80
 Asn Pro Pro Gly Lys Lys Glu Phe Met Ser Gln Gly Asn Lys Met Leu
 85 90 95
 Leu Thr Phe His Thr Asp Phe Ser Asn Glu Glu Asn Gly Thr Ile Met
 100 105 110
 Phe Tyr Lys Gly Phe Leu Ala Tyr Tyr Gln Ala Val Asp Leu Asp Glu
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Cys	Ala	Ser	Arg	Ser	Lys	Ser	Gly	Glu	Glu	Asp	Pro	Gln	Pro	Gln	Cys
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Gln	His	Leu	Cys	His	Asn	Tyr	Val	Gly	Gly	Tyr	Phe	Cys	Ser	Cys	Arg
145					150					155					160
Pro	Gly	Tyr	Glu	Leu	Gln	Glu	Asp	Arg	His	Ser	Cys	Gln	Ala	Glu	Cys
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Ser	Ser	Glu	Leu	Tyr	Thr	Glu	Ala	Ser	Gly	Tyr	Ile	Ser	Ser	Leu	Glu
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Tyr	Pro	Arg	Ser	Tyr	Pro	Pro	Asp	Leu	Arg	Cys	Asn	Tyr	Ser	Ile	Arg
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Val	Glu	Arg	Gly	Leu	Thr	Leu	His	Leu	Lys	Phe	Leu	Glu	Pro	Phe	Asp
210						215					220				
Ile	Asp	Asp	His	Gln	Gln	Val	His	Cys	Pro	Tyr	Asp	Gln	Leu	Gln	Ile
225				230						235					240
Tyr	Ala	Asn	Gly	Lys	Asn	Ile	Gly	Glu	Phe	Cys	Gly	Lys	Gln	Arg	Pro
			245						250					255	
Pro	Asp	Leu	Asp	Thr	Ser	Ser	Asn	Ala	Val	Asp	Leu	Leu	Phe	Phe	Thr
		260						265					270		
Asp	Glu	Ser	Gly	Asp	Ser	Arg	Gly	Trp	Lys	Leu	Arg	Tyr	Thr	Thr	Glu
	275						280					285			
Ile	Ile	Lys	Cys	Pro	Gln	Pro	Lys	Thr	Leu	Asp	Glu	Phe	Thr	Ile	Ile
290					295						300				
Gln	Asn	Leu	Gln	Pro	Gln	Tyr	Gln	Phe	Arg	Asp	Tyr	Phe	Ile	Ala	Thr
305				310						315					320
Cys	Lys	Gln	Gly	Tyr	Gln	Leu	Ile	Glu	Gly	Asn	Gln	Val	Leu	His	Ser
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Phe	Thr	Ala	Val	Cys	Gln	Asp	Asp	Gly	Thr	Trp	His	Arg	Ala	Met	Pro
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Arg	Cys	Lys	Ile	Lys	Asp	Cys	Gly	Gln	Pro	Arg	Asn	Leu	Pro	Asn	Gly
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385					390					395					400
Gly	Ser	Arg	Glu	Ser	Glu	Gln	Gly	Val	Tyr	Thr	Cys	Thr	Ala	Gln	Gly
			405						410					415	
Ile	Trp	Lys	Asn	Glu	Gln	Lys	Gly	Glu	Lys	Ile	Pro	Arg	Cys	Leu	Pro
		420						425					430		
Val	Cys	Gly	Lys	Pro	Val	Asn	Pro	Val	Glu	Gln	Arg	Gln	Arg	Ile	Ile
		435					440					445			
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	450					455					460				
Asn	Ile	His	Gly	Arg	Gly	Gly	Gly	Ala	Leu	Leu	Gly	Asp	Arg	Trp	Ile
465					470					475					480
Leu	Thr	Ala	Ala	His	Thr	Leu	Tyr	Pro	Lys	Glu	His	Glu	Ala	Gln	Ser
			485						490					495	
Asn	Ala	Ser	Leu	Asp	Val	Phe	Leu	Gly	His	Thr	Asn	Val	Glu	Glu	Leu
		500						505					510		
Met	Lys	Leu	Gly	Asn	His	Pro	Ile	Arg	Arg	Val	Ser	Val	His	Pro	Asp
		515					520					525			
Tyr	Arg	Gln	Asp	Glu	Ser	Tyr	Asn	Phe	Glu	Gly	Asp	Ile	Ala	Leu	Leu
	530					535					540				
Glu	Leu	Glu	Asn	Ser	Val	Thr	Leu	Gly	Pro	Asn	Leu	Leu	Pro	Ile	Cys
545					550					555					560
Leu	Pro	Asp	Asn	Asp	Thr	Phe	Tyr	Asp	Leu	Gly	Leu	Met	Gly	Tyr	Val
			565					570					575		
Ser	Gly	Phe	Gly	Val	Met	Glu	Glu	Lys	Ile	Ala	His	Asp	Leu	Arg	Phe

			580					585					590				
Val	Arg	Leu	Pro	Val	Ala	Asn	Pro	Gln	Ala	Cys	Glu	Asn	Trp	Leu	Arg		
		595					600					605					
Gly	Lys	Asn	Arg	Met	Asp	Val	Phe	Ser	Gln	Asn	Met	Phe	Cys	Ala	Gly		
	610					615					620						
His	Pro	Ser	Leu	Lys	Gln	Asp	Ala	Cys	Gln	Gly	Asp	Ser	Gly	Gly	Val		
625					630					635					640		
Phe	Ala	Val	Arg	Asp	Pro	Asn	Thr	Asp	Arg	Trp	Val	Ala	Thr	Gly	Ile		
			645					650					655				
Val	Ser	Trp	Gly	Ile	Gly	Cys	Ser	Arg	Gly	Tyr	Gly	Phe	Tyr	Thr	Lys		
		660					665					670					
Val	Leu	Asn	Tyr	Val	Asp	Trp	Ile	Lys	Lys	Glu	Met	Glu	Glu	Glu	Asp		
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<210> 8

<211> 673

<212> PRT

<213> Homo sapiens

<400> 8

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Tyr	Pro	Ser	Glu	Val	Glu	Lys	Ser	Trp	Asp	Ile	Glu	Val	Pro	Glu	Gly		
		20					25					30					
Tyr	Gly	Ile	His	Leu	Tyr	Phe	Thr	His	Leu	Asp	Ile	Glu	Leu	Ser	Glu		
		35				40					45						
Asn	Cys	Ala	Tyr	Asp	Ser	Val	Gln	Ile	Ile	Ser	Gly	Asp	Thr	Glu	Glu		
	50				55					60							
Gly	Arg	Leu	Cys	Gly	Gln	Arg	Ser	Ser	Asn	Asn	Pro	His	Ser	Pro	Ile		
65				70					75					80			
Val	Glu	Glu	Phe	Gln	Val	Pro	Tyr	Asn	Lys	Leu	Gln	Val	Ile	Phe	Lys		
			85					90					95				
Ser	Asp	Phe	Ser	Asn	Glu	Glu	Arg	Phe	Thr	Gly	Phe	Ala	Ala	Tyr	Tyr		
		100					105					110					
Val	Ala	Thr	Asp	Ile	Asn	Glu	Cys	Thr	Asp	Phe	Val	Asp	Val	Pro	Cys		
		115				120						125					
Ser	His	Phe	Cys	Asn	Asn	Phe	Ile	Gly	Gly	Tyr	Phe	Cys	Ser	Cys	Pro		
	130				135					140							
Pro	Glu	Tyr	Phe	Leu	His	Asp	Asp	Met	Lys	Asn	Cys	Gly	Val	Asn	Cys		
145				150					155					160			
Ser	Gly	Asp	Val	Phe	Thr	Ala	Leu	Ile	Gly	Glu	Ile	Ala	Ser	Pro	Asn		
			165				170						175				
Tyr	Pro	Lys	Pro	Tyr	Pro	Glu	Asn	Ser	Arg	Cys	Glu	Tyr	Gln	Ile	Arg		
		180					185						190				
Leu	Glu	Lys	Gly	Phe	Gln	Val	Val	Val	Thr	Leu	Arg	Arg	Glu	Asp	Phe		
	195					200						205					
Asp	Val	Glu	Ala	Ala	Asp	Ser	Ala	Gly	Asn	Cys	Leu	Asp	Ser	Leu	Val		
	210				215						220						
Phe	Val	Ala	Gly	Asp	Arg	Gln	Phe	Gly	Pro	Tyr	Cys	Gly	His	Gly	Phe		
225				230					235					240			
Pro	Gly	Pro	Leu	Asn	Ile	Glu	Thr	Lys	Ser	Asn	Ala	Leu	Asp	Ile	Ile		
			245					250					255				
Phe	Gln	Thr	Asp	Leu	Thr	Gly	Gln	Lys	Lys	Gly	Trp	Lys	Leu	Arg	Tyr		
		260					265						270				
His	Gly	Asp	Pro	Met	Pro	Cys	Pro	Lys	Glu	Asp	Thr	Pro	Asn	Ser	Val		
	275					280						285					
Trp	Glu	Pro	Ala	Lys	Ala	Lys	Tyr	Val	Phe	Arg	Asp	Val	Val	Gln	Ile		

290		295		300
Thr Cys Leu Asp Gly Phe Glu Val Val Glu Gly Arg Val Gly Ala Thr				
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Ser Phe Tyr Ser Thr Cys Gln Ser Asn Gly Lys Trp Ser Asn Ser Lys				
	325		330	335
Leu Lys Cys Gln Pro Val Asp Cys Gly Ile Pro Glu Ser Ile Glu Asn				
	340		345	350
Gly Lys Val Glu Asp Pro Glu Ser Thr Leu Phe Gly Ser Val Ile Arg				
	355		360	365
Tyr Thr Cys Glu Glu Pro Tyr Tyr Tyr Met Glu Asn Gly Gly Gly Gly				
	370		375	380
Glu Tyr His Cys Ala Gly Asn Gly Ser Trp Val Asn Glu Val Leu Gly				
385		390		395
Pro Glu Leu Pro Lys Cys Val Pro Val Cys Gly Val Pro Arg Glu Pro				
	405		410	415
Phe Glu Glu Lys Gln Arg Ile Ile Gly Gly Ser Asp Ala Asp Ile Lys				
	420		425	430
Asn Phe Pro Trp Gln Val Phe Phe Asp Asn Pro Trp Ala Gly Gly Ala				
	435		440	445
Leu Ile Asn Glu Tyr Trp Val Leu Thr Ala Ala His Val Val Glu Gly				
	450		455	460
Asn Arg Glu Pro Thr Met Tyr Val Gly Ser Thr Ser Val Gln Thr Ser				
465		470		475
Arg Leu Ala Lys Ser Lys Met Leu Thr Pro Glu His Val Phe Ile His				
	485		490	495
Pro Gly Trp Lys Leu Leu Glu Val Pro Glu Gly Arg Thr Asn Phe Asp				
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Asn Asp Ile Ala Leu Val Arg Leu Lys Asp Pro Val Lys Met Gly Pro				
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Thr Val Ser Pro Ile Cys Leu Pro Gly Thr Ser Ser Asp Tyr Asn Leu				
	530		535	540
Met Asp Gly Asp Leu Gly Leu Ile Ser Gly Trp Gly Arg Thr Glu Lys				
545		550		555
Arg Asp Arg Ala Val Arg Leu Lys Ala Ala Arg Leu Pro Val Ala Pro				
	565		570	575
Leu Arg Lys Cys Lys Glu Val Lys Val Glu Lys Pro Thr Ala Asp Ala				
	580		585	590
Glu Ala Tyr Val Phe Thr Pro Asn Met Ile Cys Ala Gly Gly Glu Lys				
	595		600	605
Gly Met Asp Ser Cys Lys Gly Asp Ser Gly Gly Ala Phe Ala Val Gln				
	610		615	620
Asp Pro Asn Asp Lys Thr Lys Phe Tyr Ala Ala Gly Leu Val Ser Trp				
625		630		635
Gly Pro Gln Cys Gly Thr Tyr Gly Leu Tyr Thr Arg Val Lys Asn Tyr				
	645		650	655
Val Asp Trp Ile Met Lys Thr Met Gln Glu Asn Ser Thr Pro Arg Glu				
	660		665	670
Asp				